

REMARKS

Claims 27-80 remain pending. Claims 27-37, 44-47 and 73-77 are currently under consideration. Reconsideration of the application is respectfully requested.

Claims 27, 34, 37 and 44-47 were rejected under 35USC102(b) as anticipated by Gallup et al (USPN 5,611,338). The cited reference describes a cardiac catheter having multiple lumens sized to accommodate various sensors to measure various parameters indicative of heart function. No suggestion is made that such structure is to be configured so as to support specific circulatory requirements as is now specifically called out for in independent claim 27 nor that arch perfusion ports are to be positioned relative the distal end of the elongated shaft as now claimed. Furthermore, no suggestion is made that the proximal ends of any of the lumens are to be configured for connection to a perfusion pump. It is therefore respectfully submitted that anticipation is clearly avoided.

Moreover, in view of the fact that the cited reference is not concerned with the problem of segmenting and selectively perfusing the aorta, it is respectfully submitted that a solution to such problem, let alone the specific solution presently claimed, cannot be considered obvious thereover.

Claims 28-35, 44-47, 73-77 were rejected under 35USC102(e) as anticipated by Bertolero et al (USPN 5,868,703). The cited reference describes a catheter configured for perfusion of the aorta through one lumen while a biologically active materials is supplied to the heart through another lumen. As is shown in for example FIG. 4 of the reference, corporeal perfusion ports are positioned proximal to the balloon rather than distal to the

flow control regulator as is claimed in underlying independent claim 27. Additionally, it is to be noted that lumen 36 that terminates in port 37 distal to the balloon is configured to supply only "biologically active fluids" such as for cardioplegia rather than being configured for supporting the substantially greater flow requirements necessary for corporeal support. Anticipation of independent claim 27 and all claims depending therefrom is therefore clearly precluded.

With respect to independent claim 73, it is to be noted that the cited reference does not suggest the coupling of a cardiopulmonary support machine to both lumens nor that each of the two lumens is to be capable of provide support for specific circulatory needs as claimed. Only the central lumen is interconnected to a blood pump while the distally terminating lumen is coupled to a source of biologically active fluid such as cardioplegic fluid. Anticipation is therefore clearly avoided.

Finally, with respect to independent claim 74, it is to be noted that the cited reference does not suggest disposing a flow control regulator between ports capable of providing arch and corporeal support, nor does the reference provide for the supply of oxygenated blood through both such ports. Anticipation of independent claim 74 and all claims depending therefrom is therefore also precluded.

In view of the fact that the cited reference does not address the problem of providing segmented circulatory support, it is respectfully submitted that a solution to such problem, let alone the specific problems claimed herein, cannot be considered obvious thereover.

Claims 33, 35 and 36 were rejected under 35USC103(a) as obvious over Gallup.
In view of the non-obviousness of underlying independent claim 27 as argued above, it is respectfully submitted that all claims depending therefrom similarly avoid obviousness.

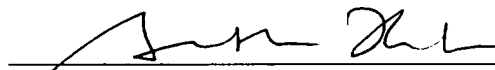
The finding of allowable subject matter in claims 29-32 is gratefully acknowledged although the incongruence with regard to the above addressed rejections thereof is noted.

In light of the above amendments and remarks, applicants earnestly believe the application to now be in condition for allowance and respectfully request that it be passed to issue.

Respectfully submitted,

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